

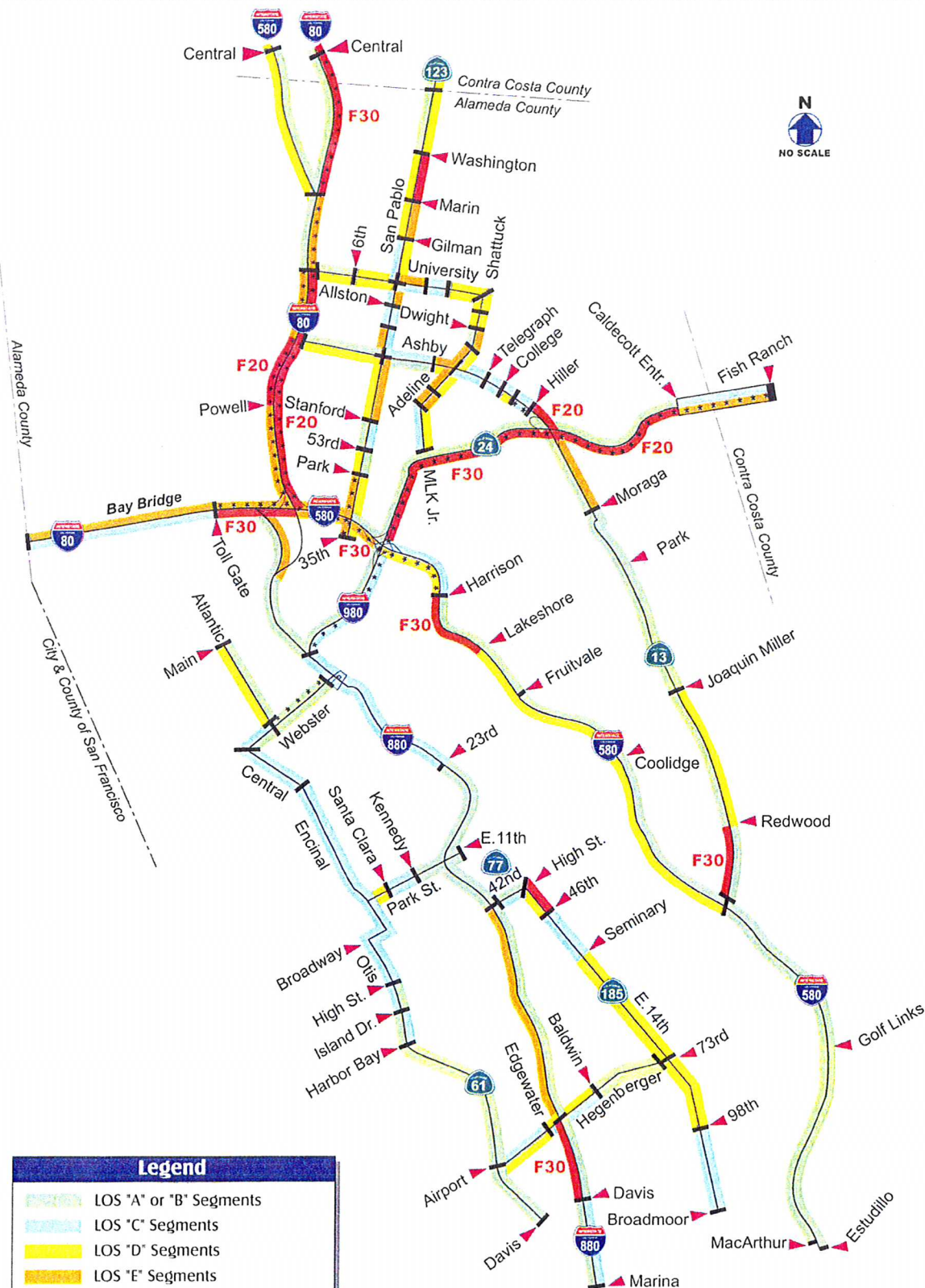
4. SYSTEM OBSERVATIONS

The systemwide statistics for the county arterials and freeways are shown in Table 6. Based on an average of all CMP roads in the County, the overall average speeds increased on freeways by 2.6 miles per hour and on arterials by 1.1 miles per hour during the p.m. peak period. The a.m. peak period experienced an increase of 2.4 mph on freeways and 0.6 mph on arterials.


Table 6
Average Vehicle Speeds in Peak Hours
on Alameda County CMP Roadways

	2006 Results	2008 Results
Freeways P.M.	48.4 mph	51.0 mph
Arterials P.M.	24.6 mph	25.7 mph
Freeways A.M.	50.0 mph	52.4 mph
Arterials A.M.	25.9 mph	26.5 mph

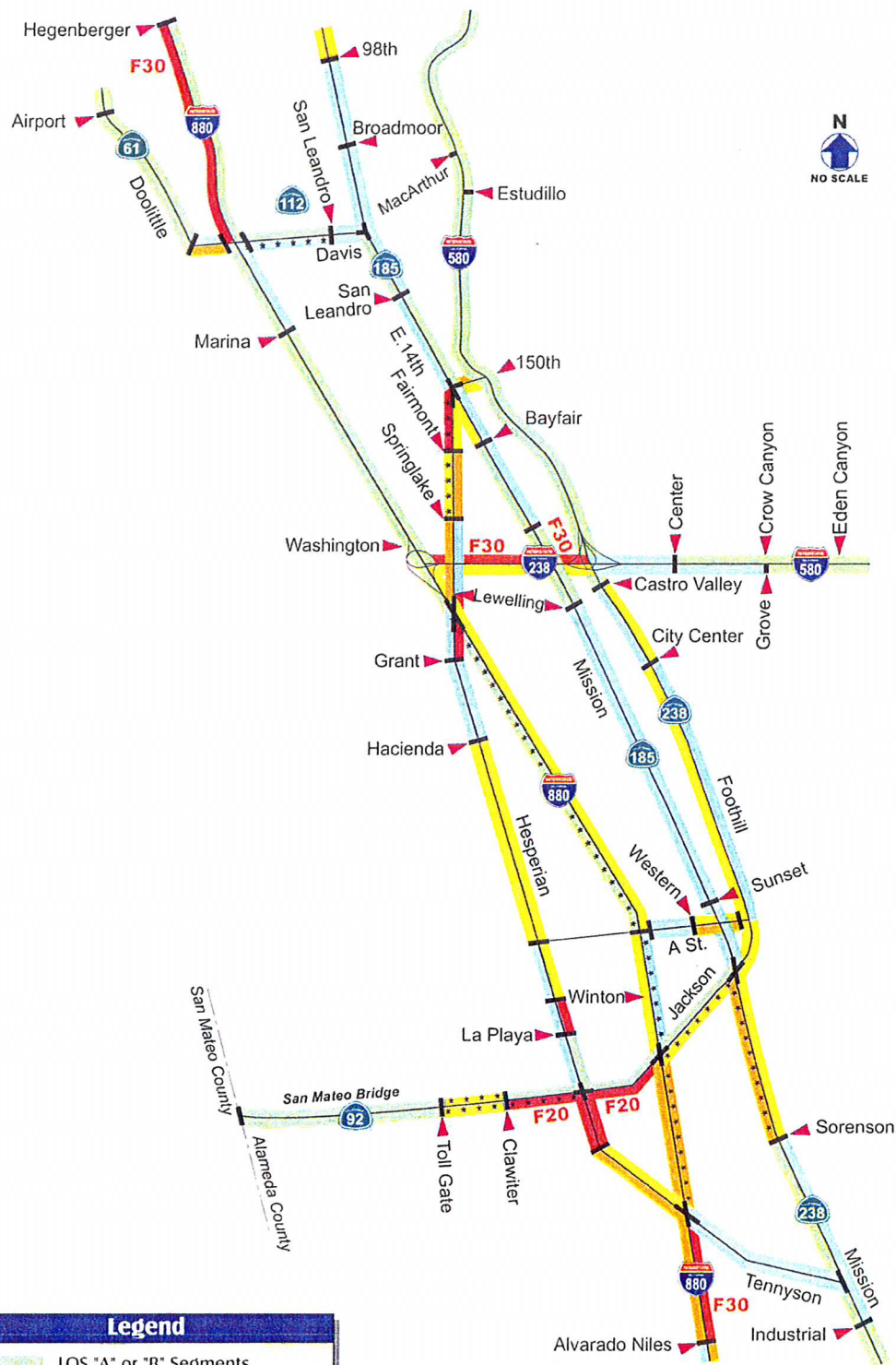
Figures 3 through 10 show the results of the P.M. and A.M. peak travel time runs and the resulting LOS for each of the segments on the CMP designated system by roadway and by jurisdiction. These figures each portray a sub-area of the County which generally corresponds to the County planning areas. (See Appendix tables on pages A-1 through A-26 for a full listing of all results).



Legend	
	LOS "A" or "B" Segments
	LOS "C" Segments
	LOS "D" Segments
	LOS "E" Segments
	LOS "F" Segments
F30	Average Speed < 30 ≥ 20mph
F20	Average Speed < 20 ≥ 10mph
.....	This segment was previously identified as LOS "F" in 1991 when the CMP was first adopted.

 Alameda County CMP 2008 LOS Monitoring Study	Figure
	3

**2008 PM Peak
Level of Service Results
Planning Area 1**

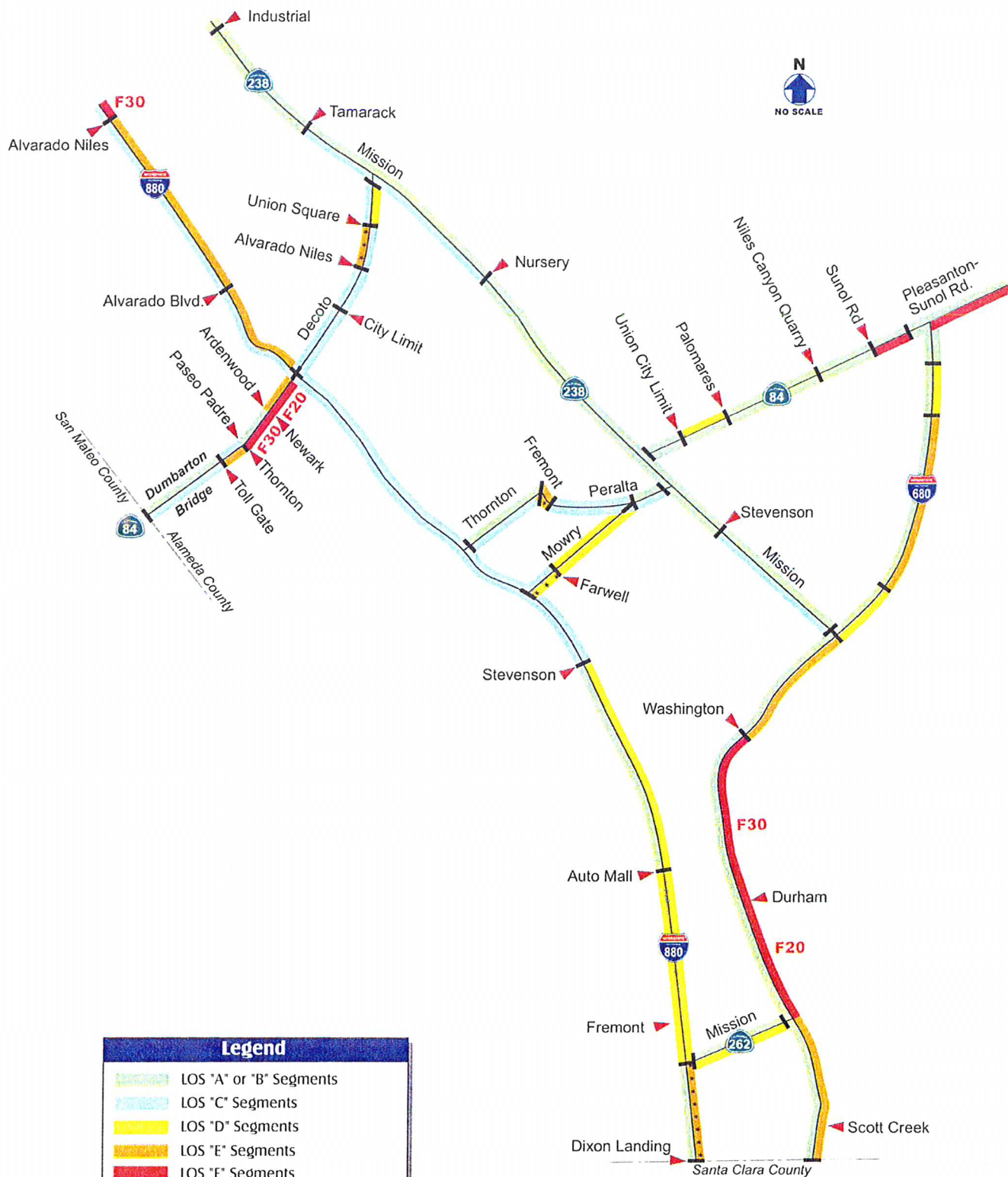


Alameda County CMP
2008 LOS Monitoring Study

2008 PM Peak Level of Service Results Planning Area 2

Figure

4



Alameda County CMP
2008 LOS Monitoring Study

2008 PM Peak Level of Service Results Planning Area 3

Figure

5

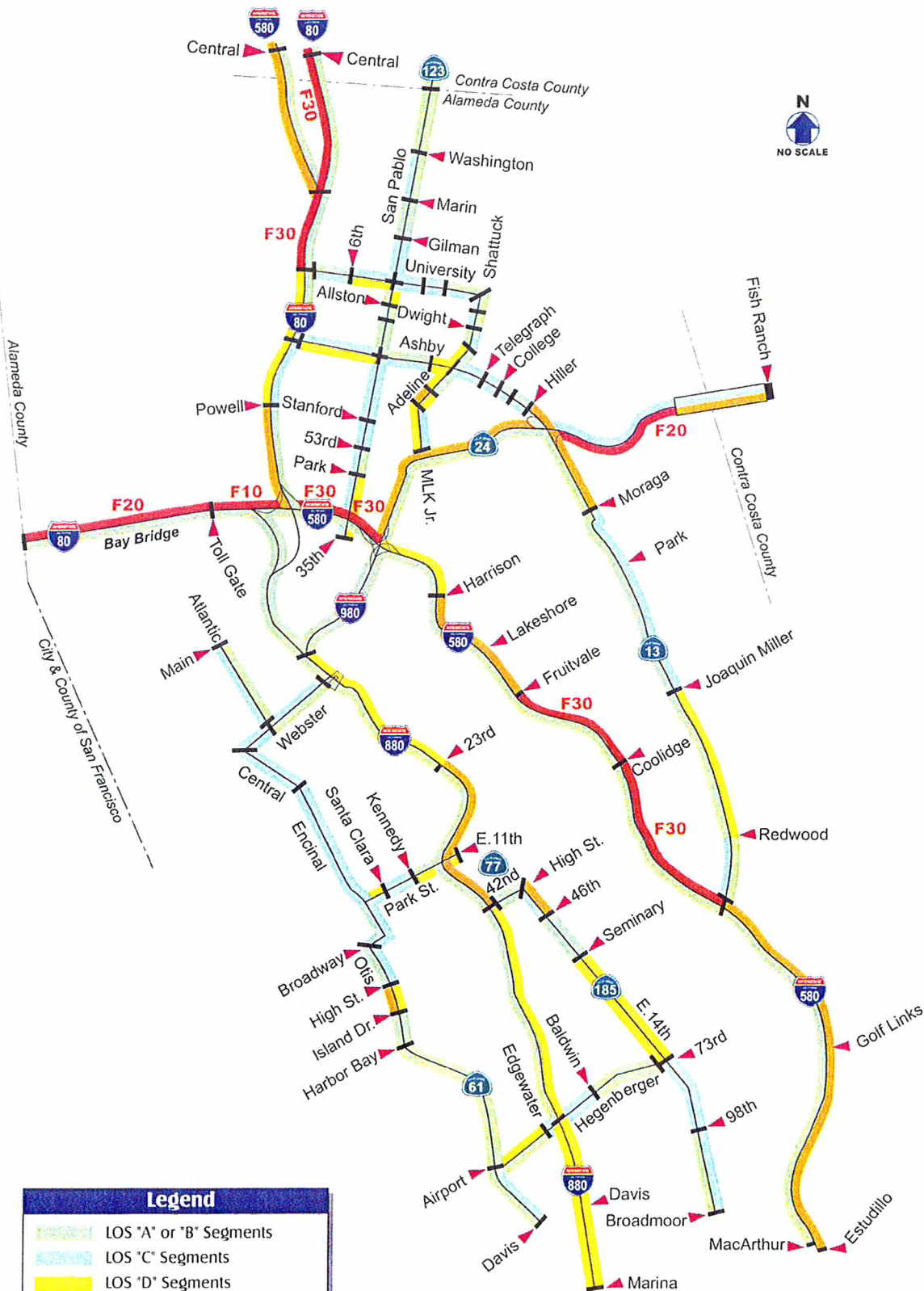


Alameda County CMP
2008 LOS Monitoring Study

**2008 PM Peak
Level of Service Results
Planning Area 4**

Figure

6

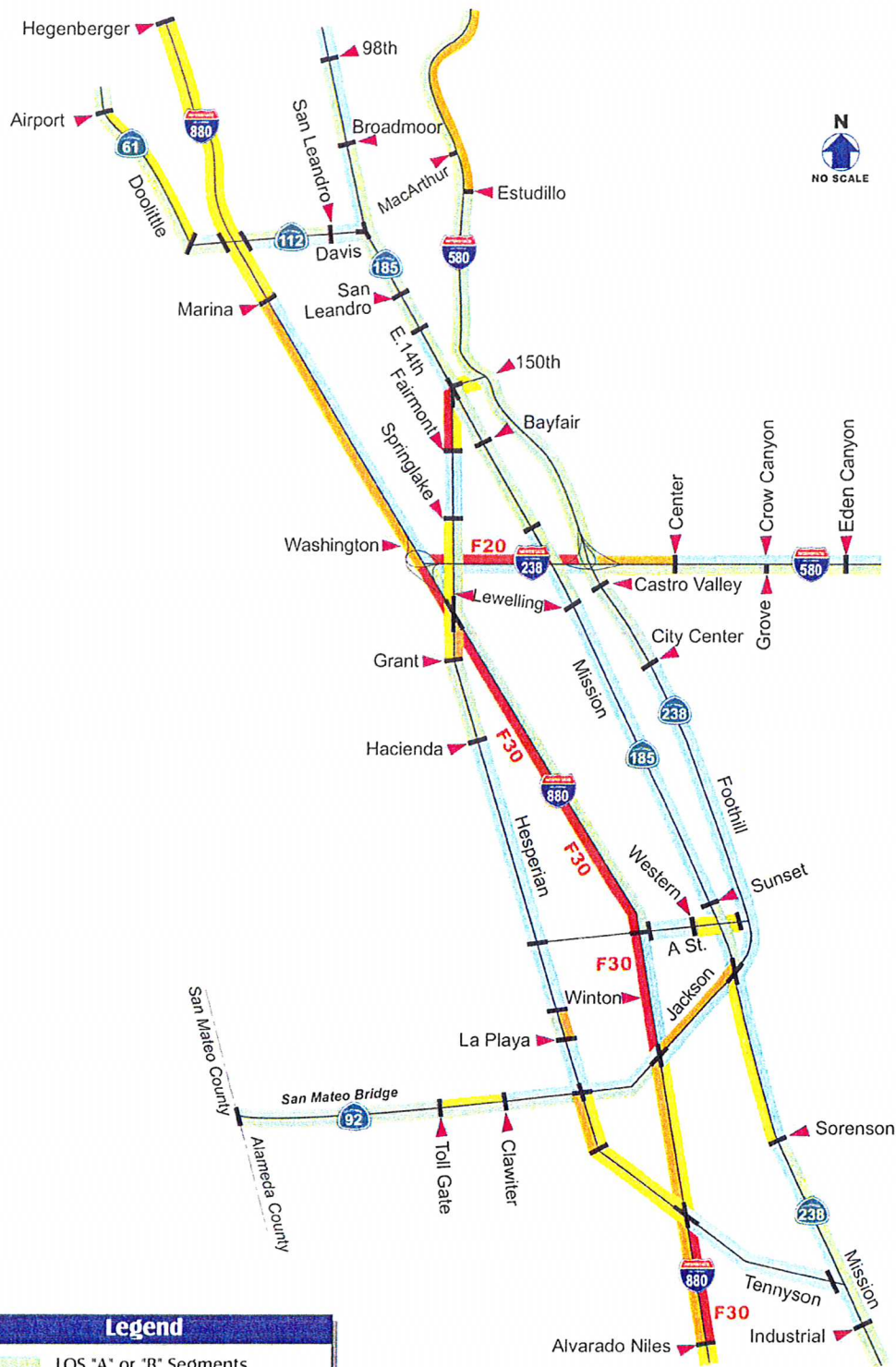


Alameda County CMP
2008 LOS Monitoring Study


2008 AM Peak Level of Service Results Planning Area 1

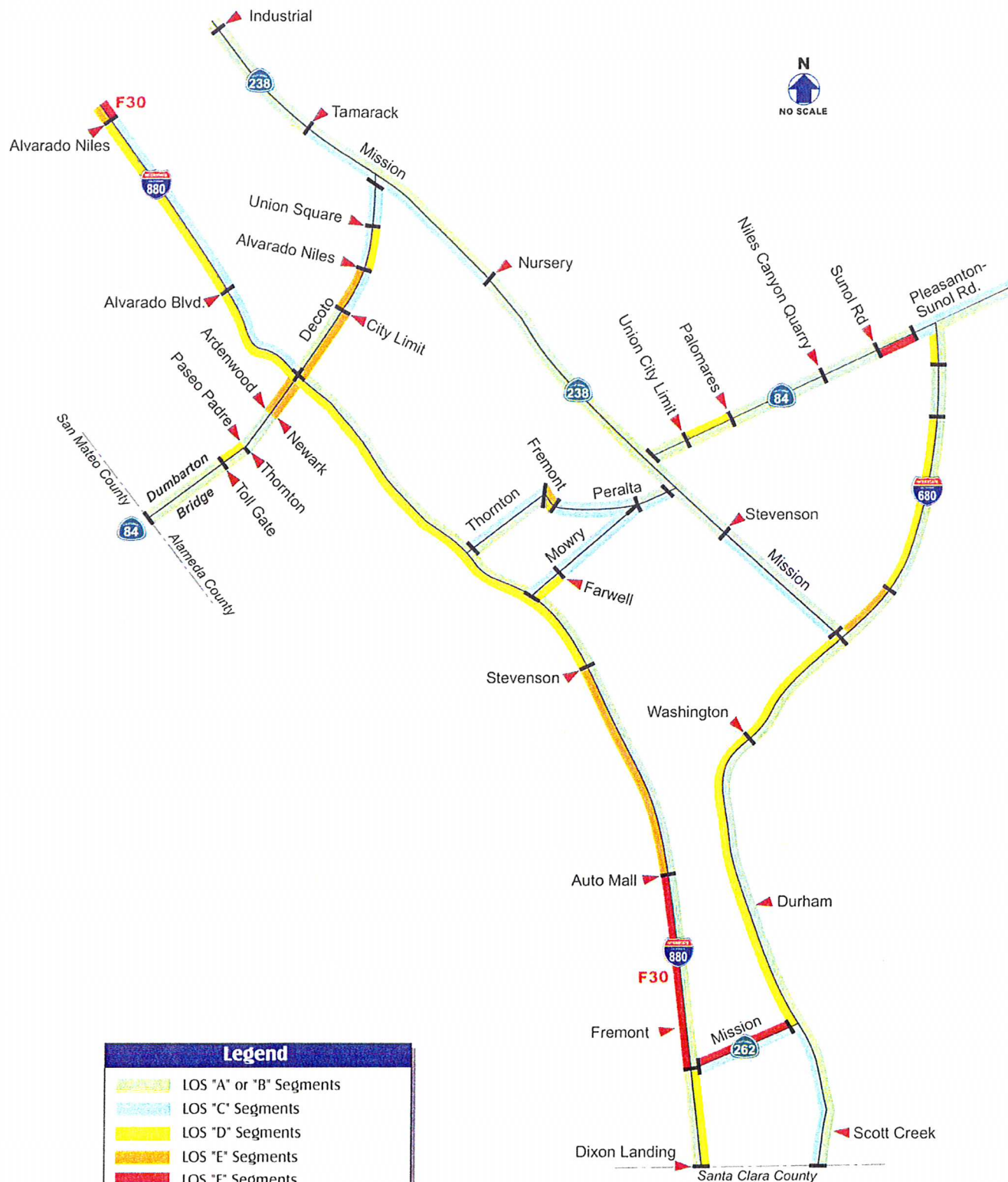
Figure

7



Legend	
	LOS "A" or "B" Segments
	LOS "C" Segments
	LOS "D" Segments
	LOS "E" Segments
	LOS "F" Segments
F30	Average Speed < 30 ≥ 20mph
F20	Average Speed < 20 ≥ 10mph

	Alameda County CMP 2008 LOS Monitoring Study	Figure 8
	2008 AM Peak Level of Service Results Planning Area 2	



Alameda County CMP
2008 LOS Monitoring Study

2008 AM Peak Level of Service Results Planning Area 3

Figure

9



Legend	
	LOS "A" or "B" Segments
	LOS "C" Segments
	LOS "D" Segments
	LOS "E" Segments
	LOS "F" Segments
F30	Average Speed < 30 ≥ 20mph
F20	Average Speed < 20 ≥ 10mph

	Alameda County CMP 2008 LOS Monitoring Study	Figure
	2008 AM Peak Level of Service Results Planning Area 4	10

COMPARISONS TO PREVIOUS STUDIES

The 2008 P.M. peak period travel time and speed survey results were compared to the survey results from 1991 to 2006 on the major routes on the Alameda County CMP system. Table 7 shows these results for freeway corridors, while Table 8 lists the major arterial corridors. For each route, the segments have been aggregated to show the entire length of the route throughout Alameda County.

Freeways. Average speeds in four freeway corridors increased notably in 2008 compared to 2006, while one freeway corridor experienced significant drop in speed. The freeways that experienced a significant increase in speed are:

I-80 westbound from Central to Tollgate : This 6.1- mile corridor operated at LOS F (27.7 mph) in 2006. The 2008 surveys showed average speeds improving to 36.2 mph, LOS E a change of 30 percent.

I-880 southbound from I-980 to Dixon Landing: This is the longest corridor in Alameda County, nearly 31 miles long. It experienced an average speed of 37.1 mph with a service level of E in 2006. In 2008, the average speeds improved by 10.5 mph to 47.6 mph, LOS D, a 28.3% increase.

I-580 eastbound from I-80/I-580 Split to I-238: This is a 15.9 mile corridor traversing part of northern and central Alameda County. It experienced an average speed of 39.3 mph in 2006 with a level of service of E. The 2008 surveys showed an increase in average speed from 39.3 mph to 47.0 mph and the corridor is operating at to LOS D.

SR-13 northbound from Mountain to Hiller: This corridor is 5.4 miles long and experienced average speeds of 38.8 mph in 2006 with a level of service of E. In 2008, the average speeds increased by 12.2 mph or 31% to 51.0 mph, LOS C.

Conversely, average speeds dropped in one corridor as noted below:

I-680 northbound from Scott Creek to Alcosta (on): Average speeds in this 21.3 mile corridor have degraded from 52.9 mph in 2006 to 43.4 mph in 2008, a drop in LOS from C to D.

Other corridors either show modest increases or decreases in speeds with the exception of SR 24 westbound from Fish Ranch to I-580 (Off), which is a reverse commute direction. This corridor has stayed almost at the same speed ranging between 58.4 and 58.8 mph, since 2004.

Arterials. Average speeds remained steady on twenty-two (22) arterial routes with notable decreases on 2 arterial routes and increase on one arterial route between 2006 and 2008.

The two notable decreases in speeds occurred on 1) SR 238 Mission northbound from Jackson to I-680 northbound where average speeds decreased from 27.7 mph in 2006 to 23.1 mph in 2008,

Table 7

Comparison of P. M. Peak Hour Travel Time Data & Speed on Selected Freeway Routes (1991-2008)

CMP Route	Dir	From	To	Length (miles)	1991	1992	1994	1996	1998	2000	2002	2004	2006	2008
I-80	EB	Tollgate	Central	6.35	15:56 23.5	18:24 20.4	17:19 21.7	18:23 20.8	18:50 20.2	14:18 26.6	19:45 19.3	12:03 31.6	17:05 23.10	18:52 20.9
	WB	Central	Tollgate	6.11	14:27 25.3	15:26 23.7	15:41 23.3	14:53 24.6	13:07 28.0	20:52 17.6	16:33 22.2	13:10 27.8	12:38 27.7	9:38 36.2
I-580	EB	SR 238/ Foothill	I-205	30.33	32:55 56.3	33:40 55.0	33:37 55.1	33:04 55.0	n/a n/a	49:25 40.5	59:43 30.5	53:22 34.1	45:46 36.8	47:41 34.5
	WB	I-205	SR 238/ Foothill	30.15	32:10 57.2	33:05 55.6	32:07 55.1	29:30 55.0	n/a n/a	33:09 55.0	33:10 54.5	30:02 60.2	30:35 58.6	29:03 61.4
I-580	EB	I-80/I-580 Split	I-238	15.88	18:18 52.6	18:35 51.8	21:53 44.0	18:13 53.2	16:16 60.0	15:21 62.7	17:45 54.7	22:15 42.8	24:26 39.3	19:27 47.0
	WB	I-238	I-80	14.73	16:11 57.7	16:50 55.5	18:20 51.0	15:36 52.2	14:58 61.2	14:36 62.8	15:25 59.5	15:37 56.6	15:58 55.2	14:05 62.6
I-680	NB	Scott Creek	Alcosta (on)	21.13	21:59 58.1	22:59 56.7	22:31 56.7	24:16 52.2	25:07 50.5	21:54 58.2	24:39 51.4	30:21 41.8	23:48 52.9	29:14 43.4
	SB	Alcosta (on)	Scott Creek	21.30	21:45 59.0	22:05 58.1	23:23 54.9	21:04 60.6	19:06 66.8	20:13 63.2	20:44 61.6	19:27 65.7	21:51 58.5	20:10 63.4
I-880	NB	Dixon Landing	I-980	31.41	40:49 44.8	41:15 44.4	42:37 42.9	50:26 45.5	49:21 38.8	41:26 47.5	50:20 37.5	38:23 49.1	41:50 44.6	43:10 43.2
	SB	I-980	Dixon Landing	30.85	41:55 43.0	44:41 40.4	47:36 37.9	40:31 45.8	37:19 49.7	40:48 49.1	45:46 40.5	45:57 38.6	49:53 37.1	38:53 47.6
SR 13	NB	Mountain	Hillier	5.43	6:12 53.6	6:40 49.9	6:51 48.5	6:45 48.1	6:06 53.2	6:24 50.9	6:27 50.4	9:25 34.6	8:42 38.8	6:10 51:00
	SB	Hillier	Jet I-580	5.45	6:04 56.4	5:46 59.4	6:31 52.5	6:55 47.2	5:31 59.1	5:59 59.5	5:58 54.6	6:03 54.1	7:19 48.7	7:15 49.0
SR 24	EB	I-580 (on)	Fish Ranch	4.52	9:19 30.1	9:35 29.2	9:25 29.8	11:10 24.3	6:59 38.9	8:08 33.4	12:41 21.4	6:48 39.9	10:39 25.5	11:32 23.5
	WB	Fish Ranch	I-580 (Off)	4.47	5:00 54	4:58 58	5:01 54	5:24 50	4:30 60	4:41 57	4:26 60.5	4:34 58.7	5:03 58.8	5:05 58.4

Table 8

Comparison of P.M. Peak Hour Travel Data & Speed on Selected Arterial Routes (1991-2008)

CMP Route	Direction	From	To	Length (Miles)	1991	1992	1994	1996	1998	2000	2002	2004	2006	2008
Hesperian	NB	Tennyson	14 th St.	5.50	19:35 17.2	19:19 17.5	18:40 18.1	16:06 20.5	17:18 19.5	18:10 17.3	22:00 15.3	22:10 14.9	24:55 13.4	25:09 13.4
	SB	14 th St.	Tennyson	5.60	17:20 19.4	16:05 20.9	17:38 19.1	16:10 20.7	16:13 20.7	16:41 19.5	17:24 19.3	17:33 19.1	18:13 18.5	20:29 16.4
SR 13 Ashby	EB	I-80	Hiller	3.77	15:17 14.7	13:19 16.9	13:40 16.5	13:40 16.5	14:26 15.6	16:57 13.4	15:04 15.0	16:47 13.5	15:44 14.4	14:08 16.0
	WB	Hiller	I-80	3.80	14:13 16.0	13:09 17.2	13:49 16.4	15:09 15.0	14:06 16.1	14:22 15.9	16:36 13.8	15:27 14.7	14:00 16.3	13:29 16.9
SR 61	SB	Atlantic	Davis	7.57	18:40 24.9	18:07 25.0	18:30 24.5	19:36 23.1	19:01 23.9	17:41 29.4	19:47 23.0	20:59 21.6	18:46 24.2	17:25 26.1
	NB	Davis	Atlantic	7.57	19:32 24.3	18:38 25.5	18:41 25.5	18:58 24.1	19:24 23.4	19:17 25.6	18:49 24.1	20:20 22.3	19:29 23.3	16:55 26.9
SR 84 Fremont	WB	SR-238	I-880 SB	4.30	10:07 25.0	8:27 30.5	10:56 23.5	10:27 24.1	11:42 22.0	10:23 24.9	11:33 22.3	9:48 26.3	9:49 26.29	9:51 26.2
	EB	I-880 SB	SR-238	4.30	11:21 24.3	10:24 24.8	11:45 21.9	11:38 18.7	12:56 19.9	14:31 16.6	11:58 21.5	10:43 24.1	11:29 22.47	11:15 22.9
SR 84 Livermore	WB	I-580 WB	Isabel	*5.23 (4.14)	9:20 32.4	10:36 28.5	9:27 32.0	11:03 27.4	11:01 27.5	10:20 10.2	10:45 23.1	5:30 38.5	7:43 40.71	7:25 38.2
	EB	Isabel	I-580 WB	*5.23 (4.14)	11:32 26.2	10:32 28.7	10:23 29.1	10:46 28.1	11:12 27.0	11:57 22.6	11:25 21.8	5:46 36.8	8:34 36.6	8:25 35.8
SR 123	SB	Carlson	35 th St.	5.45	16:26 19.0	16:32 19.7	14:22 22.7	18:09 18.0	18:15 17.9	18:48 17.4	17:22 18.8	17:38 18.5	22:38 14.45	19:53 16.5

CMP Route	Direction	From	To	Length (Miles)	1991	1992	1994	1996	1998	2000	2002	2004	2006	2008
	NB	35 th St.	Carlson	5.46	16:56 20.1	15:32 21.1	18:12 18.0	17:42 18.5	26:00 12.6	18:36 17.6	22:39 14.4	19:56 16.4	22:53 14.31	23:36 13.9
	SB	42nd St	SR 92/238	10.46	42:55 14.1	28:47 21.8	n/a n/a	30:31 20.6	29:12 21.5	32:11 19.3	30:56 20.3	33:25 18.8	34:23 18.25	34:22 18.0
SR 185	NB	SR 92/238	42 nd St	10.31	38:34 18.6	28:54 21.7	n/a n/a	28:40 21.8	31:02 20.2	29:34 21.3	29:36 21.2	34:36 17.9	34:50 17.76	31:08 20.0
SR 238 Mission	NB	I-680 NB	Jackson	12.39	24:05 30.7	n/a n/a	27:30 26.9	27:10 27.3	27:04 27.4	26:37 29.2	30:05 24.6	30:30 24.4	27:55 26.63	27:55 26.6
	SB	Jackson	I-680 NB	12.36	24:28 30.3	n/a n/a	28:15 26.2	26:45 27.7	27:20 27.1	24:26 31.0	26:13 28.2	28:27 26.1	26:45 27.73	32:04 23.1
MLK/Shattuck Ave	NB	SR 24	University	2.78	7:02 17.2	6:43 18.3	6:07 20.1	7:07 17.2	7:21 16.7	8:05 15.2	7:36 16.2	7:43 15.9	7:31 16.4	7:31 16.4
	SB	University	SR 24	2.76	10:07 16.4	9:12 18.0	9:59 16.6	10:26 15.7	10:45 15.4	12:01 13.8	12:45 13.0	10:50 15.3	9:55 16.7	11:11 14.8
University Ave	EB	I-80 Off	Shattuck Pl	2.05	7:02 17.5	6:43 18.3	6:07 20.1	7:07 17.2	7:27 16.5	7:45 15.9	7:01 17.5	8:23 14.7	7:24 16.63	7:00 17.6
	WB	Shattuck Pl	I-80 Off	2.05	6:38 18.5	6:30 18.9	7:07 17.3	7:27 16.5	9:51 12.5	7:45 15.9	7:01 17.5	8:23 14.7	7:24 16.63	7:00 17.6
Decoto Rd/ Dumbarton Br	WB	Hwy 238	County	8.97	11:46 45.7	12:43 42.3	13:56 38.6	16:30 32.6	13:58 38.5	14:54 37.3	17:25 30.9	16:12 33.2	15:51 33.9	15:21 35.1
	EB	County Line	Hwy 238	8.36	12:41 42.3	14:01 28.3	14:40 36.6	17:49 30.0	17:06 31.4	15:50 34.9	14:35 36.8	17:01 29.5	16:32 30.3	19:23 25.9
SR 84 Niles Canyon	EB	SR 238	Isabel	*13.27 (15.35)	n/a n/a	n/a n/a	25:20 36.4	25:17 34.3	n/a n/a	29:20 31.4	38:08 24.2	37:02 24.4	30:13 26.4	27:1 29.4
	WB	Isabel	SR 238	*12:93 (15.01)	n/a n/a	n/a n/a	20:37 42.7	25:58 41.4	n/a n/a	19:56 45.9	22:41 39.7	24:42 40.8	21:55 35.4	16:28 40.9

Segments with Notable Changes in the Last Two Years

Table 9 shows those roadways and segments for which the 2008 P.M. peak period surveys reported significant changes in the travel time results as compared to previous surveys. Routes are listed that have seen a change of two or more Level of Service grades between 2006 and 2008. For consistency purposes, only the segments that are not split to shorter segments in 2008 are reported.

Overall there are more segments showing increases in speed compared to the number of segments showing a decrease in speeds between 2006 and 2008. Decreases in speeds appear to be mostly related to construction activities with the exception of SR 84 eastbound Dumbarton Bridge. Improvements are likely due to the economic downturn combined with record high gas prices.

Table 9
Segments with Significant Changes from Previous Year
P.M. Peak Period

CMP Route	Segment	Change in Speed Data	Comments
<i>Segments with Decrease in Speed Resulting in Level of Service Change of 2 or More Grades</i>			
I-880 NB	A St. to I-238	Decrease from 57 to 47 mph	Construction due to I-238 Widening
SR 84 EB	San Mateo County line to Toll Plaza	Decrease from 62 to 53 mph.	
SR 92 EB	Toll Plaza to Clawitter	Decrease from 62 mph to 41 mph	Construction of SR 92/I-880 interchange
Hesperian NB	Fairmont to 14 th	Decrease from 25 to 16 mph.	Construction activity
Mowry EB	Fairwell to SR 84	Decrease from 25 mph to 15 mph	
SR 238 (Mission) SB	Jackson to Sorenson	Decrease from 20 to 13 mph	
<i>Segments with Increase in Speed Resulting in Level of Service Change of 2 or More Grades</i>			
I-80 EB	SF County Line to Toll Plaza	Increase from 24 to 54 mph	
I-238EB	I-880 to I-580	Increase from 19 to 42 mph	
I-580 EB	Portola to 1 st St.	Increase from 48 to 56 mph	
I-580 WB	Tassajara Rd. to I-680	Increase from 44 to 64 mph	
I-580 WB	Center to I-580/I-238	Increase from 39 to 55 mph	
I-580 WB	SH 13 (Off) to Fruitvale	Increase from 54 to 62 mph	
I-580 WB	SH 24 On ramp to I-80/I-580 Split	Increase from 24 to 57 mph	

I-580 WB	I-80 JCT to Central	Increase from 39 to 67 mph	
I-880 SB	I-980 to 23 rd	Increase from 23 to 50 mph	
I-880 SB	23 rd to High/42 nd	Increase from 30 to 69 mph	
I-880 SB	I-238 to A St.	Increase from 43 to 56 mph	
I-880 SB	SR 262/Mission to Dix Landing (Off)	Increase from 29 to 61 mph	
I-980 WB	SR 24 @ 580 to I-880	Increase from 42 to 65 mph	
SR 13 SB	Moraga Ave. to Joaquin Miller/Lincoln	Increase from 49 to 70 mph	
A Street WB	Western to I-880	Increase from 12 to 21 mph	
SR 61 NB	Central/Webster to Atlantic	Increase from 15 to 30 mph	
SR 84 /Mowry EB	Peralta to SH 238	Increase from 15 to 27 mph	

